

REMARKS

With the entry of this amendment, claims 1 to 4, 7, 9 to 14, and 16 to 27 remain in the application. The limitation of claim 6 has been incorporated into claim 1, i.e., requiring the “multiplicity of regions”, and therefore claim 6 has been canceled. The limitation of claim 15 has been incorporated into claim 14, and therefore claim 15 has been canceled. Claim 14 is about verifying that a user is live, rather than it being a fake, electronically injected fingerprint. In addition, claims 5 and 8 have been canceled. Claim 4 has been amended to be dependent on claim 1, and claim 25 has been amended to depend on claim 23.

Since this amendment presents no new issues and in fact narrows the issues presented for reconsideration by the cancellation of claims, it is respectfully requested that the amendment be entered, and the application passed to issue. In the alternative, it is requested that the amendment be entered for purposes of appeal.

Claim 1 to 9, 11 to 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,717,777 to Wong et al. in view of Japanese Patent JP 04158434 to Matsubashi. This rejection is respectfully traversed for the reason that the combination of Wong et al. and Matsubashi do not show or suggest the claimed invention.

As mentioned above, the limitation of claim 6 has been incorporated into claim 1 and the limitation of claim 15 has been incorporated into claim 14. In the current rejection, the Examiner discusses only claim 1, saying that with respect to claim 2 to 9 and 11 to 13, “the rejection is maintained and incorporated by references as set forth in the prior office action (paper # 12)”. As to claims 14 to 27, the Examiner state that they are rejected fro the same reasons as set forth in claims 1 to 13, “because claims 14-27 are claiming subject matter combinations of claims 1-13”.

As pointed out in the amendment filed June 25, 2004, the technique discussed by Wong et al. is different from claim 1 because only one fingerprint image (from which are taken “live coordinate points” to be compared to

“reference coordinate points”) is taken by Wong et al. (Wong et al., column 1, line 64 through column 2, line 4). In claim 1, authentication may be based on more than a single live fingerprint scan, in contrast to the one live fingerprint scan employed for authentication in the cited passage from Wong et al. The limitation of a “multiplicity of small regions” (incorporated into claim 1 from claim 6) is not suggested by Wong et al. Wong et al. merely state that certain metrics derived from the live fingerprint are to be compared to reference metrics, “validating the identity when the candidate set of metrics substantially corresponds with the reference set of metrics.” (Wong et al., column 4, lines 35-36). There is no discussion in Wong et al. of making such comparison on the basis of a “single portion” of a fingerprint image or a “multiplicity of small regions”.

The Examiner acknowledges that Wong et al. fail to disclose the fingerprint sensor to be incorporated into a pointing device, and for this feature, the Examiner relies on Matsubashi. While Matsubashi describes a pointing device combined with a fingerprint detection means, Matsubashi does not provide that the scanner acquire “*at least* two fingerprint images of a finger” (claim 1, lines 4 and 5) (emphasis added). The ability of the claimed invention to require more than a single live fingerprint scan for authentication is useful for purposes of preventing “replay attacks” using stored fingerprints to gain unauthorized access. (Specification, page 11, lines 12-18) Matsubashi does not provide such a capability, and neither does the combination of Wong et al. and Matsubashi.

Claim 10 was rejected under 35 U.S.C. §103(a) as being unpatentable over the patent to Wong et al. in view of U.S. Patent No. 5,999,637 to Toyoda. This rejection is also respectfully traversed for the reason that the combination of Wong et al. and Toyoda does not disclose or suggest the claimed invention.

Claim 10 is dependent on claim 1 and is therefore patentable for the same reasons as advanced above. Moreover, since claim 10 is dependent on claim 1 and the Examiner considered it necessary to combine Matsubashi with Wong et al. to reject claim 1, it follows that the Examiner should have included Matsubashi with the Wong et al. and Toyoda references in making his rejection.

In making this rejection, the Examiner acknowledges that Wong et al.

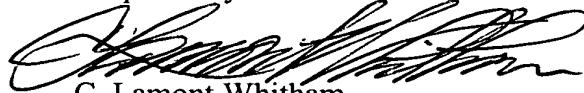
“fails to disclose step of comparing successive and possibly consecutive images taken from a single period of contact of finger”, and for this feature, the Examiner relies on Toyoda. It is noted, however, that Toyoda et al. do not describe the combination of a fingerprint scanner with a pointing device or any other feature of a mobile computer or other portable electronic device. In addition, the passage from Toyoda et al. cited by the Examiner does not relate to “comparing successive, and possibly consecutive, images taken from a single period of contact of said finger with said scanner” (claim 10) but instead discusses the possibility of taking multiple sets of fingerprints “from each of ten fingers of the specific person” so that a “most appropriate” set of such fingerprints may be selected as a reference set based upon specific standards (Toyoda et al., column 16, lines 1-16).

In view of the foregoing, it is respectfully requested that this amendment be entered, that the application be reconsidered, that claims 1 to 4, 7, 9 to 14, and 16 to 27 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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